

# 2007 WATER QUALITY REPORT

## FOR

### The City of Grinnell Water Department

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our groundwater is drawn from the Cambrian-Ordovician Sandstone aquifer.

Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Total Coliform Bacteria	0	Presence of coliform bacteria in >5% of monthly samples	0	01/07 12/07	0	NO	Naturally present in the environment
Combined radium (pCi/L)	0	5	1.6	2/24/2003	N/A	NO	Erosion of natural deposits
Copper (ppm)	1.3	AL=1.3	0.114	09/15/2007	0.008 to 0.395	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	4	4	1.2	06/16/2004	N/A	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Lead (ppb)	0	AL=15	9	9/15/2007	0 to 11	NO	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate [as N] (ppm)	10	10	0.8	6/19/2007	0.8 to 0.8	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Chlorine (ppm)	MRDLG=4.0	MRDL=4.0	1.37	01/2007 to 12/2007 12 Month Running Average	0.74 to 1.82	NO	Water additive used to control microbes
TTHM (ppb) [Total trihalomethanes]	N/A	80	7.07	7/18/2007	N/A	NO	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	N/A	60	ND	7/18/2007	N/A	NO	By-products of drinking water disinfection
Sodium (ppm)	N/A	N/A	233	6/19/2007	N/A	NA	Erosion of natural deposits; Added to water during treatment process

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

#### DEFINITIONS

- Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG) -- The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected

- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

## **GENERAL INFORMATION**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Grinnell Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

## **ADDITIONAL HEALTH INFORMATION**

Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or, high blood pressure.

## **SOURCE WATER ASSESSMENT INFORMATION**

A source water assessment has been completed at this time. The City of Grinnell obtains its water from the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to be not susceptible to contamination because of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The Grinnell wells will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source was completed by the Iowa Department of Natural Resources and is available from the Grinnell Water Department Director at 641-236-2600.

## **OTHER VIOLATIONS:**

None

## **OTHER INFORMATION**

Our water utility is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plant, wells or fire hydrants, please contact us at 641-236-2600 or the local police/sheriff department 641-236-2650. We appreciate your assistance in protecting the water system.

## **CONTACT INFORMATION**

For questions regarding this information, please contact Jan Anderson at 641-236-2600 during the following hours: 8:00a.m.-12:00p.m. and 1:00p.m.-4:00p.m.

Decisions regarding the water system are made at the City of Grinnell Council meetings held on the first and third Mondays of each month in the Council Chambers of the Grinnell Community Center, 927 4<sup>th</sup> Avenue, Grinnell, Iowa. Meetings are held at 7:00 p.m. and are open to the public.

**This report will not be mailed to water customers of the City of Grinnell's Water Department. Copies of the report will be available upon request at the City Offices located at 927 Fourth Avenue, Grinnell, Iowa 50112 or by calling 641-236-2600. A copy will also be available on the City of Grinnell website. [www.grinnelliowa.gov](http://www.grinnelliowa.gov)**